HAER DEL 1-MILF.V,

STATE BRIDGE NO. 123A

Stratham Lane (Road 123), spanning Kings Causeway Branch
Mitford Neck State Wildlife Area
Mitford Vicinity
Kent County
Delaware

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD

National Park Sergice

U.S. Custom House

200 Chestnut Street
Philadelphia, PA 19106

HISTORIC AMERICAN ENGINEERING RECORD STATE BRIDGE NO. 123A

HAER No. DE-52

LOCATION:

Stratham Lane (Road 123), spanning Kings Causeway Branch, Milford Neck State Wildlife Area, Milford Vicinity,

Kent County, Delaware.

USGS Milford, DE Quadrangle, UTM Coordinates:

18.467470.4313970

DATE OF CONSTRUCTION:

1933

BUILDER:

Wilson Contracting Company (Wilmington, Delaware), for

Kent County

PRESENT OWNER:

Delaware Department of Transportation

PRESENT USE:

Highway bridge

SIGNIFICANCE:

Bridge No. 123A is a representative example of a single-span, beam-on-pile-bent timber bridge. This form of span was very commonly used in southern Delaware up to the mid-twentieth century to carry minor roads over small watercourses. Increasingly, however, these small, traditional timber bridges are being replaced with modern

structures.

PROJECT INFORMATION:

An October 1996 evaluation of Bridge No. 123A resulted in a recommendation of replacement. This recordation project was undertaken pursuant to an agreement between DelDOT and the Delaware State Historic Preservation Office. Bridge No. 123A was recorded in November 1996 by the Cultural Resource Group of Louis Berger & Associates, Inc., East Orange, New Jersey, for DelDOT. Photography was performed by Rob Tucher, Senior Photographer. Research was conducted by Philip E.

Pendleton, Architectural Historian.

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DESCRIPTION

State Bridge No. 123A is a timber bridge of the single-span beam-on-pile-bent type. The bridge spans Kings Causeway Branch for Stratham Lane, a two-lane road. Located amid state wildlife management lands, the setting is a rural one of coastal wetlands and forest. The bridge is thirteen feet, ten inches in length, and twenty-one feet, eight inches in width. The supporting substructure consists of two timber bents, each comprising seven one-foot-diameter piles carrying a ten-by-twelve-inch header. Four-by-twelve joists span the interval between the bents and bear the deck, which consists of four-by-ten planks and has been paved with asphalt road surface. Four-by-ten planks also make up the wing walls. The simple wooden railings consist of four-by-six posts and two-by-six rails.

HISTORY OF BRIDGE NO. 123A

State Bridge No. 123A was built in 1933 for the Kent County government. The bridge was one element in the construction of a slag road from Thompsonville to Sour Apple Tree. As of November 1996, it was slated for replacement with a modern structure.

The construction of Bridge No. 123A was one small element in a sustained program of road improvement that transformed the Delaware landscape in the quarter-century between 1917 and 1942. As in other states, a Good Roads Movement had taken shape during the century's first decade. T. Coleman duPont, one of the state's wealthiest citizens, had so warmed to this aspect of Progressivism that he had commenced highway improvements in 1911 under his own volition, obtaining a charter from the state and completing a modern road in Sussex County from Selbyville to Georgetown by 1917. Following duPont's lead, the state legislature enacted the Highway Act of 1917, establishing the State Highway Department, the State Aid Road Law of 1919, authorizing the counties to issue highway bonds enabling them to match state highway funds, and a gasoline tax in 1923 to provide further revenues for road construction and maintenance. By 1926, with 588 miles of modern roadway built since 1917, "every town and hamlet in the state was connected to the state highway system with a hard surfaced road," according to Warren Mack, a former chief engineer for the State Highway Department (Mack 1947:539-48).

Between 1926 and 1935, the highway authorities concentrated on developing a system of improved secondary highways to improve local transportation in the countryside and in northern Delaware's growing suburban areas. An additional 651 miles of state highway were built, while New Castle County constructed some 200 miles of hard-surfaced road. Kent and Sussex counties concentrated on improving their dirt roadways during these years. The state pressed on with a major program for the improvement of secondary roadways after 1935, when the legislature directed the State Highway Department to take over administration of the three counties' approximately 2,600 miles of county road. By 1942, 450 more miles of roadway were asphalted, and dirt roads throughout the state were improved. The construction of new bridges formed a

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major aspect of the 1935-1942 secondary road improvement project, with over 250 built during the seven-year period (Mack 1947:548-49).

The Stratham Lane construction of 1933 represented an improvement of a public road that had been created by 1859, at least in regard to the Stratham Lane segment of the work (French 1859). The building of the present bridge, which replaced an earlier timber structure of unknown date, was a harbinger of the extensive program of bridge construction for secondary highways that would take place throughout the state over the following decade. Wilson Contracting Company of Wilmington carried out the construction of the bridge, intended to be able to carry a 15-ton truck load, at a cost to the county of \$740 (HABS/HAER 1988). The original design drawings directed that the lumber to be employed should be selected from southern yellow pine, douglas fir, southern cypress, or oak, and that it should be treated with creosote. The lumber was obtained from the Century Wood Preserving Company of Newport, Delaware (DelDOT Plan Files). The maintenance files for the bridge do not indicate that alterations have been made to the structure, and physical inspection does not suggest any alterations other than the paving of the deck. In 1971, Bridge No. 123A was one of eight small Kent County spans evaluated by DelDOT as to whether replacement, by an arrangement of pipes running beneath the roadway, would be practicable. The bridge was retained (DelDOT Maintenance Files).

Surviving single-span timber bridges remain fairly common on southern Delaware's secondary roads, generally built in Bridge No. 123A's configuration of pile bents, timber stringers, wooden decks, and wooden railings. Again, like Bridge No. 123A, most evidently date to the 1930s. The employment of this traditional and relatively simple form represented the continuation of a historic bridge type that was well suited to a region characterized by numerous backroads and narrow watercourses requiring short spans, and in that period by extensive remaining stands of appropriate timber (HABS/HAER 1988). Bridge No. 123A is a representative example of a historic Delaware bridge type, once highly prevalent in the state's southern region but in recent years increasingly superseded by more modern spans.

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